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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,618	10/24/2003	Kreg A. Martin	2120-02800	6471
23505	7590	08/16/2007		
CONLEY ROSE, P.C. David A. Rose P. O. BOX 3267 HOUSTON, TX 77253-3267			EXAMINER HSU, ALPUS	
			ART UNIT	PAPER NUMBER
			2616	
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			08/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,618

Applicant(s)

MARTIN ET AL.

Examiner

Alpus H. Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-31, 34-45, 48-53 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 32, 33, 46 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 13, 15-22, 34, 48, 51-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 13, 34 and 48, line 2, each term of "the delays" lacks antecedent basis.

In claim 15, line 3, "the second" should be changed to -- the second circuit --.

In claim 19, line 2, "the first" has no clear antecedent basis.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by GHAFARI in U.S. Patent No. 5,751,220, hereinafter referred to as GHAFARI.

Referring to claim 1, GHAFARI discloses a device that comprises: a plurality of circuits (56-1 and 56s) coupled together by asynchronous links, wherein the plurality of circuits includes a master circuit (56-1), and wherein the master circuit is configured to send a first synchronization signal to one or more of the plurality of circuits (56s), and wherein each circuit that receives the first synchronization signal is configured to responsively send a second synchronization signal to one or more of the plurality of circuits (see col. 3, line 63 to col. 4, line 5, col. 4, lines 18-34, col. 9, lines 43-59).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2-4, 23-26, 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over GHAFARI in view of OLSON et al. in U.S. Patent No. 7,127,633 B1, hereinafter referred to as OLSON.

Referring to claims 23 and 37, GHAFARI differs from the claims, in that, it does not disclose the device operated under Fibre Channel (FC) network environment, comprising network nodes, FC fabric, and FC switches. But GHAFARI does indicate such device can be applied to other system for interconnecting local control modules (see col. 13, line 63 to col. 14, line 12). The application of Fibre Channel (FC) network, comprising network nodes, FC fabric, and FC switches is also well known in the art.

OLSON, for example, from similar field of endeavor, teaches a fibre channel storage area network (SAN), comprises network nodes, FC fabric, and FC switches, with controllers having master/slave relationship (see col. 12, line 1 to col. 13, line 28) similar to the GHAFARI.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the device of GHAFARI into the FC network environment in OLSON

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to provide optical data communication to further improve the transmission speed and capacity for the system.

Referring to claims 2-4, 24-26, 38-40, OLSON teaches the data packet transmission, reception and storage (see col. 20, lines 3-59).

7. Claims 5-8, 14-18, 27-30, 35, 41-44, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over GHAFFARI in view of OLSON, as applied to claims 1, 23 and 37 above, and further in view of SERGEANT et al. in U.S. Patent No. 4,007,448 A, hereinafter referred to as SERGEANT.

Referring to claims 5-8, 14-18, 27-30, 35, 41-44, and 49, the device, method and system provided from GHAFFARI in view of OLSON fails to disclose the utilization of word counters, which is also well known in the art and commonly applied in data communications field for network synchronization among the controller circuits.

SERGEANT, for example, from the similar field of endeavor, teaches the utilization of word counters for achieving network synchronization among the controller circuits (see col. 16, line 65 to col. 17, line 10), which can be easily adopted by one of ordinary skill in the art into the device, method and system provided from GHAFFARI in view of OLSON, to further improve the system efficiency.

8. Claims 9, 10, 20, 31, 36, 45 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over GHAFFARI in view of OLSON, as applied to claims 1, 23 and 37 above, and further in view of NGUYEN et al. in U.S. Patent No. 6,941,357 B2, hereinafter referred to as NGUYEN.

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Referring to claims 9, 10, 20, 31, 36, 45 and 50, the device, method and system provided from GHAFARI in view of OLSON fails to disclose the utilizations of system reset/power-on and hot-plug insertion, which are also well known in the art and commonly applied in data communications field for network fault recover.

NGUYEN, for example, from the similar field of endeavor, teaches the utilization of system reset/power-on and hot-plug insertion (see col. 3, line 50 to col. 4, line 39), which can be easily adopted by one of ordinary skill in the art into the device, method and system provided from GHAFARI in view of OLSON, to provide the system fault recovery to further improve the system reliability.

9. Claims 11, 12, 32, 33, 46 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 13, 19, 21, 22, 34, 48, 51-53 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Miller et al., Inagaki et al., Kapanen, Read et al., Eidson, Brown et al., Crocker et al., and Chapman are all cited to show the master/slave devices synchronization utilizing synchronization impulse or signal similar to the claimed invention.

Banks '813 and '646, Pittelkow et al. '065 and '741, Berman, Paul, Olson et al. '633, and Bullen et al. are all cited to show the common feature of Fibre Channel switching system, comprising FC fabric and FC switches similar to the claimed invention.

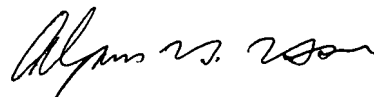
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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHH



Alpus H. Hsu
Primary Examiner
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